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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|----------------------------|---------------------|----------------------|------------------------|-------------------------|--|
| 10/645,874 | 08/20/2003 | Kenneth F. Buechler | 071949-7002 | 8658 | |
| 30542 7 | 06/21/2006 | | EXAMINER | | |
| FOLEY & LA | ARDNER LLP | LUM, LEON YUN BON | | | |
| P.O. BOX 802 SAN DIEGO. | 78 CA 92138-0278 | | ART UNIT | PAPER NUMBER | |
| 0. E. Diboo, | | | 1641 | | |
| | | | DATE MAILED: 06/21/200 | DATE MAILED: 06/21/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Ap | plication No. | Applicant(s) | | |
|---|--|--|---|---|------------|--|
| Office Action Summary | | 10 | /645,874 | BUECHLER ET AL. | | |
| | | Ex | aminer | Art Unit | | |
| | | | on Y. Lum | 1641 . | | |
| Period fo | The MAILING DATE of this commu or Reply | nication appears | on the cover sheet with the | correspondence address | | |
| WHIC - Exter after - If NO - Failu Any I | ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MISSIONS of time may be available under the provision: SIX (6) MONTHS from the mailing date of this come of period for reply is specified above, the maximum some to reply within the set or extended period for reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b). | MAILING DATE s of 37 CFR 1.136(a). munication. tatutory period will app y will, by statute, caus | OF THIS COMMUNICATIO In no event, however, may a reply be till oly and will expire SIX (6) MONTHS from the the application to become ABANDONE | N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133). | | |
| Status | | | | • | | |
| 1)🖂 | Responsive to communication(s) file | ed on 24 April 2 | 006. | | | |
| | | 2b)⊠ This acti | | | | |
| 3) | Since this application is in condition | for allowance | except for formal matters, pr | osecution as to the merits is | | |
| | closed in accordance with the pract | ice under <i>Ex pa</i> | rte Quayle, 1935 C.D. 11, 4 | 53 O.G. 213. | | |
| Dispositi | on of Claims | | | | | |
| 4)🛛 | Claim(s) 1-42 is/are pending in the | application. | | | | |
| | 4a) Of the above claim(s) is/a | are withdrawn fr | om consideration. | | | |
| 5) | Claim(s) is/are allowed. | | | | | |
| 6) 🗌 | Claim(s) is/are rejected. | | | | | |
| 7) | Claim(s) is/are objected to. | | | ; | | |
| 8)🔯 | Claim(s) <u>1-42</u> are subject to restrict | ion and/or elect | ion requirement. | | | |
| Applicati | on Papers | | | | | |
| 9)[| The specification is objected to by the | ne Examiner. | | | | |
| 10) | The drawing(s) filed on is/are | : a) accepte | d or b) objected to by the | Examiner. | | |
| | Applicant may not request that any object | ection to the draw | ing(s) be held in abeyance. Se | e 37 CFR 1.85(a). | | |
| | Replacement drawing sheet(s) including | g the correction is | required if the drawing(s) is ob | pjected to. See 37 CFR 1.121(d) |) . | |
| 11) | The oath or declaration is objected t | o by the Exami | ner. Note the attached Office | Action or form PTO-152. | | |
| Priority u | ınder 35 U.S.C. § 119 | | | • | | |
| _ | • | for foreign pric | ritu under 25 II C.C. S. 110/a | ; i) (d) or (f) | | |
| | Acknowledgment is made of a claim ☐ All b) ☐ Some * c) ☐ None of: | rior roreign prio | illy under 35 U.S.C. 9 119(a |)-(a) or (i). | | |
| a)ı | _ | documents hav | ve heen received | | | |
| | 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | |
| | 3. Copies of the certified copies | | | • | | |
| | application from the Internation | • | | g - | | |
| * 5 | See the attached detailed Office action | <u>.</u> | | ed. | | |
| | | | | | | |
| | | | | | | |
| Attachmen | tie\ | | | | | |
| Attachmen | e of References Cited (PTO-892) | | 4) Interview Summary | v (PTO-413) | | |
| 2) Notic | e of Draftsperson's Patent Drawing Review (| | Paper No(s)/Mail D | oate | | |
| | nation Disclosure Statement(s) (PTO-1449 o r No(s)/Mail Date | r PTO/SB/08) | 5) Notice of Informal 6) Other: | Patent Application (PTO-152) | | |

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DETAILED ACTION

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Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-28 and 35-42, drawn to a method for detecting the presence or amount of one or more biologically active natriuretic peptides, classified in class 436, subclass 501.
 - II. Claims 29-33, drawn to a method of inhibiting degradation of a natriuretic peptide, classified in class 424, subclass 9.2.
 - III. Claim 34, drawn to a pharmaceutical composition comprising one or more inhibitors of prolyl-specific DPP and one or more additional molecules, classified in class 424, subclass 130.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are directed to related natriuretic peptides. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the

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instant case, the inventions as claimed do not overlap in scope, are not obvious variants, and have a materially different mode of operation, function, and effect.

Group I is a method with the function and effect of assaying a sample *in vitro* to determine the presence of a specific natriuretic peptide, which is different from the function and effect of Group II. Group II is a method with the purpose of treating a subject *in vivo* by administering a specific inhibitor. Because the function and effect of the two groups are different, the modes of operation are also different. In Group I, the assaying method is performed using a specific binding partner coupled with a detection step and specific signal reduction requirements, which are not required limitations in Group II. In Group II, the administering method requires the step of supplying a subject with an inhibitor, which is not a required limitation of Group I. Furthermore, since Group I is directed towards an assaying method in an *in vitro* environment and Group II is directed towards a treating method *in vivo*, the two groups are not obvious variants and there is no overlap in scope.

3. Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are not capable of use together and have different designs, modes of operation, and effects.

Group I is an assaying method for detecting the presence of natriuretic peptides in a sample, which is a completely different design and effect from the pharmaceutical

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compound of Group II. The pharmaceutical compound has the effect of inhibiting natriuretic peptides, but is not claimed as applied in the scope of an *in vitro* assaying test. Rather, the pharmaceutical compound is administered to a subject, which is a completely different mode of operation than the assay of Group I. Because of the difference in scope, the two groups are not capable of use together.

- 4. Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the product as claimed can be used in the materially difference process of analyte detection in a competitive immunoassay test.
- 5. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

In addition, because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper. Group I is directed towards in vitro assays, which requires searching in databases and references that would not necessarily include information on the *in vivo* environment required by Group II or the

composition of the pharmaceutical compound in Group III. Group II is directed towards an administration of prolyl-specific DPP, which may not necessarily include the multi-component pharmaceutical compound of Group III. In addition, references that teach the composition of Group III may only disclose the process of making the composition and will not necessarily disclose a specific process of using that composition *in vivo*.

6. This application contains claims directed to the following patentably distinct species: BNP and ANP (Group I only).

In the event that Group I is elected, an election between the two species below is required:

- 1. BNP, claims 3, 12, 19, 36, and 39.
- 2. ANP, claims 4, 13, 20, 37, and 40.

The species are independent or distinct because BNP and ANP are structurally different peptides comprising different amino acid sequences.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, for Group I, claims 1-2, 5-11, 14-18, 21-28, 35, 38, and 41-42 are generic. Claims 3-4, 12-13, 19-20, 36-37, and 39-40 are subject to species election.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims

readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

7. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions under 35 U.S.C.103(a) of the other invention.

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unpatentable over the prior art, the evidence or admission may be used in a rejection

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon Y. Lum whose telephone number is (571) 272-2878. The examiner can normally be reached on weekdays from 8:00am-5:00pm.

a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leon Y. Lum Patent Examiner Art Unit 1641

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